



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,937	09/18/2001	Kishiko Itoh	JP920000353US1	8224
53493 7590 04/28/2008 LENOVO (US) IP Law 1009 Think Place Building One, 4th Floor 4B6 Morrisville, NC 27560			EXAMINER NICKERSON, JEFFREY L.	
			ART UNIT	PAPER NUMBER
			2142	
			MAIL DATE	DELIVERY MODE
			04/28/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/954,937

Applicant(s)

ITO ET AL.

Examiner

JEFFREY NICKERSON

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-11,13-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-11,13-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-884)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 14 February 2008

DETAILED ACTION

1. This communication is in response to Application No. 09/954,937 filed on 18 September 2001. The amendment presented on 31 October 2007 is hereby acknowledged. Claims 1, 3-7, 9-11, 13-19, and 21-22 have been examined.

Response to Amendment

2. All outstanding objections and rejections regarding the application are hereby withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 15, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "suspend event" is used by

Art Unit: 2142

the claim to mean "resume from suspended/disabled state", while the accepted meaning is "suspend from non-suspended/enabled state." The term "resume event" is used by the claim to mean "suspend from non-suspended/enabled state", while the accepted meaning is "resume from suspended/disabled state." The term is indefinite because the specification does not clearly redefine the term. The examiner recommends switching the two event names.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 4-5, 11, 13-16, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falcon et al (US 6,295,556 B1), and further in view of Wallach et al (US 6,170,028 B1) and Glenning (US 5,655,126).

Regarding claim 1, Falcon teaches a communication adapter selection method for selecting a given communication adapter in a system environment in which a plurality of communication adapters are installed in a computer apparatus to communicate with an external entity (Falcon: abstract specifies the device is chosen based on the connection

object; See also Figure 3, item 82 is specified based on the connection, See also Figure 7, "Connect Using" drop down box), comprising the steps of:

storing information for identifying among the plurality of communications adapters a communication adapter specified by a user as a communication adapter to be enabled to the exclusion of other of the plurality of communication adapters (Falcon: Figure 7, "Connect Using" drop down box allows user to select preferred network adapter for this connection profile; col 5, lines 44-50 specify the connection objects are stored);

determining whether the plurality of communication adapters installed in said computer apparatus are available or not (Falcon: col 7, lines 27-61 specifies the system can determine if specific preferred devices are available and can even substitute other adapters if they are of the same type; See also Figure 11, item 1100);

enabling said communication adapter specified by the user if it is determined that said communication adapter specified by the user is available (Falcon: Figure 11, item 1102; col 9, lines 21-32 specifies the communication adapter is enabled if the device is available), wherein other communication adapters remain disabled (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled).

Falcon does not teach disabling all of the plurality of adapters before enabling a communication adapter. Nor does Falcon teach wherein other communication adapters are disabled to reduce power consumption.

Wallach, in a similar field of endeavor, teaches disabling all of the plurality of adapters before enabling a communication adapter (Wallach: col 4, line 59 – col 5, line

7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister definition).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Wallach for disabling all communication adapters before enabling a communication adapter. The teachings of Wallach, when implemented in the Falcon system, will allow one of ordinary skill in the art to disable all communication adapters prior to a configuration change. One of ordinary skill in the art would be motivated to utilize the teachings of Wallach in the Falcon system in order to allow self re-optimization of a system after a configuration change.

The Falcon/Wallach system doesn't teach wherein other communication adapters are disabled to reduce power consumption.

Glenning, in a similar field of endeavor, teaches wherein other communication adapters are disabled to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Glenning for disabling communication adapters to reduce power use. The teachings of Glenning, when implemented in the Falcon/Wallach system, will allow one of ordinary skill in the art to reduce power based on user connection preferences. One of ordinary skill in the art would be motivated to utilize the teachings of Glenning in the Falcon/Wallach system in order to prolong battery life of portable devices, by disabling non-used adapters.

Regarding claim 3, this claim contains limitations found within claim 1 and the same rationale of rejection is used where applicable, and wherein:

receiving an input event for identifying among the plurality of communication adapters installed in the computer apparatus a communication adapter specified by a user as an adapter to be enabled to the exclusion of the other of the plurality of communication adapters (Falcon: Figure 7 "Connect Using" drop down box provides that an input event is used).

Regarding claim 4, this claim contains limitations found within claim 1 and the same rationale of rejection is used where applicable, and wherein:

storing a number of communication adapters required by a user (Falcon: Figure 5 depicts storing a number of connection objects, which are bound to adapters, that are created by the user; See also col 6, lines 54-62);

enabling among said plurality of communication adapters a given communication adapter (Falcon: Figure 11, item 1102; col 9, lines 21-32 specifies the communication adapter is enabled if the device is available) to the exclusion of other of the plurality of communication adapters (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled) based on said stored number of the communication adapters (Falcon: Figure 12, item 1200, Figure 7, "Auto Connect" feature, and Figure 5, items 76 provide the enabling is done based on the stored number of connection objects, which are bound to adapters).

Regarding claim 5, the Falcon/Wallach/Glenning system teaches wherein the priorities assigned to set up communication adapters are stored (Falcon: Figure 7, "Connect Using" and "Auto Connect" sections provide for priority adapters and connect objects) and the given communication adapter is enabled on said stored number of the communication adapters and stored priorities (Falcon: Figure 12, item 1200, Figure 7, "Auto Connect" feature, and Figure 5, items 76 provide the enabling is done based on the stored number of connection objects, which are bound to adapters; Figure 7, "Connect using" and Figure 11, item 1100 provides the enabling is done in accordance with the preferred/priority adapter, if possible).

Regarding claim 11, this apparatus claim contains limitations corresponding to claim 1, and the same rationale of rejection is used where applicable.

Regarding claim 13, the Falcon/Wallach/Glenning system teaches further comprising adapter count storage for storing a number of communication adapters to be enabled, wherein said setting unit enables as many communication adapters as said number of the adapters stored in said adapter storage (Wallach: Figure 9B, item 926 depicts a "maxlan-boards" variable that tracks how many lan board should be enabled; See also col 13, lines 39-64), in descending order of priority (Falcon: Figure 7 depicts setting a preferred connection adapter; See also Figure 11, items 1100, 1104, 1108, and 1110, where the system tries to use the preferred device but then finds other adapters that could work with the connection and asks user to enable preferred adapter).

Regarding claim 14, this apparatus claim contains limitations corresponding to claim 3, and the same rationale of rejection is used where applicable.

Regarding claim 15, the Falcon/Wallach/Glenning system teaches a computer apparatus in which a plurality of communication adapters are installed, said computer apparatus communication with an external entity through said plurality of communication adapters (Falcon: abstract) and comprising:

a utility for controlling the enable/disable of said communication adapters
(Falcon: abstract);

a driver for exchanging data between said utility and communication adapters
(Glenning: Figure 3, item 100; col 5, lines 34-59);

wherein said utility disables all of the plurality of communication adapters
(Wallach: col 4, line 59 – col 5, line 7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister definition) and provides a suspend
(Glenning: resume) event to said driver if a communication adapter to be enabled to the exclusion of other of the plurality of communication adapters (Falcon: Figure 6 provides the Ethernet adapter is enabled while the modems remain disabled) is not enabled previously (Glenning: col 4, lines 12-22 specify resume events for enabling the adapter) or provides a resume (Glenning: suspend) event to said driver if the communication adapter to be enabled is enabled and requested to be disabled (Glenning: col 4, lines 1-11 specify a suspend results in the driver being disabled), wherein other communication

adapters remain disabled to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use).

Regarding claim 16, the Falcon/Wallach/Glenning system teaches wherein said utility inquires of said driver to obtain a number and a type of existing communication adapters (Wallach: Figure 9B, item 900 provides the management utility can identify device type; Figure 9B, item 918 provides each adapter has a logical slot number; See also col 13, lines 39-50 for logical board numbers and col 12, lines 63-67 for device type identification).

Regarding claim 21, this storage medium claim contains limitations corresponding to claim 1, and the same rationale of rejection is used where applicable.

Regarding claim 22, this storage medium claim contains limitations corresponding to claim 3, and the same rationale of rejection is used where applicable.

8. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falcon et al (US 6,295,556 B1), in view of Wallach et al (US 6,170,028 B1), and Glenning (US 5,655,126), and in further view of Yeap et al (US 6,961,762 B1).

Regarding claim 6, the Falcon/Wallach/Glenning system teaches a communication adapter selection method for selecting a given communication adapter in a system

environment in which a plurality of communication adapters are installed in a computer apparatus to communicate with an external entity (Falcon: abstract specifies the device is chosen based on the connection object; See also Figure 3, item 82 is specified based on the connection, See also Figure 7, "Connect Using" drop down box), comprising the steps of:

pre-registering information about a communication adapter to be enabled (Falcon: Figure 7, "Connect Using" drop down box allows user to select preferred network adapter for this connection profile; col 5, lines 44-50 specify the connection objects are stored);

disabling all of the plurality of adapters before enabling a communication adapter (Wallach: col 4, line 59 – col 5, line 7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister);

enabling a communication adapter to be enabled to the exclusion of the other of the plurality of communications adapters (Falcon: Figure 11, item 1102; col 9, lines 21-32 specifies the communication adapter is enabled if the device is available), wherein other communication adapters remain disabled (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled) to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use);

The Falcon/Wallach/Glenning system does not teach pre-registering predetermined condition of an operating environment, detecting event information generated by a change in the operating environment, analyzing said event information

to determine if it meets the predetermined condition, and enabling the communication adapter in response to the event condition.

Yeap, in a similar field of endeavor, teaches further comprising:

pre-registering predetermined condition of an operating environment (Yeap: Figure 3 specifies location condition; See also Figure 1 which depicts identifying which AP the laptop is connecting to; See also Figure 4A and 4B which depict further settings based on location profile; See also col 2, lines 35-47);

detecting event information generated by a change in the operating environment of said computer apparatus (Yeap: col 2, lines 35-47 specifies detecting link quality degradation; See also Figure 5, steps 510 and 512);

analyzing said event information to determine whether said event information meets said predetermined condition of said operating environment or not (Yeap: col 2, lines 35-47 specifies analyzing link quality degradation; See also Figure 5, steps 510 and 512; See also col 7, lines 24-44);

if said event information meets said predetermined condition of said operation environment, enabling a communication adapter (Yeap: col 7, line 24 – col 8, line 7 specify that if link quality falls too far then the communication adapter is enabled to work with another AP).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Yeap for monitoring wireless link quality and reconfiguring adapter settings based on location and AP. The teachings of Yeap, when implemented in the Falcon/Wallach/Glenning system, will allow one of ordinary

skill in the art to enable adapters to communicate with nearby AP and disable adapters not in use to conserve power. One of ordinary skill in the art would be motivated to utilize the teachings of Yeap in the Falcon/Wallach/Glenning system in order to automate user tasks by automatically detecting closer APs and enabling network adapters to communicate with them.

Regarding claim 10, the Falcon/Wallach/Glenning/Yeap system teaches a method for setting up a communication adapter comprising the steps of:

- reading information about the configuration of a communication adapter configured in a system from a profile (Falcon: Figures 6 and 7 depict configuration of connection objects; col 5, lines 44-50 specify the connection objects are stored which means they're inherently read when profile is edited; Yeap: Figures 3, 4A and 4B specify configuring connection profiles);

- setting at least one location where the system performs communications (Yeap: Figure 3, item 324 and abstract provide that wireless configuration based on profiles is adjusted based on location);

- setting a default priority assigned to a communication adapter to be enabled (Falcon: Figure 7, "Connect Using" provides for assigning a priority/preferred adapter);

- disabling all communication adapters (Wallach: col 4, line 59 – col 5, line 7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister);

storing in a profile said default priority assigned to a communication adapter to be enabled and said number of the communication adapters to be enabled for each of said at least one set location (Falcon: Figure 7 "Connect Using" provides the preferred adapter is stored in the connection object; Figure 7 "Auto Connect" feature provides the user can specify how many objects should connect given their location, as per Yeap's design).

enabling said communication adapter to be enabled, wherein other communication adapters remain disabled (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled) to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use).

9. Claims 7, 9, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falcon et al (US 6,295,556 B1), in view of Wallach et al (US 6,170,028 B1), Glenning (US 5,655,126), and Yeap et al (US 6,961,762 B1), and in further view of Henriksson et al (US 6,052,381).

Regarding claim 7, the Falcon/Wallach/Glenning/Yeap system teaches adapter selection method for enabling a given communication adapter in a system environment comprising communication adapters installed in a portable information device (Yeap: col 1, lines 50-62 specify that the WNIC is contained within the computer) and other communication adapters (Falcon: Figure 6 depicts multiple communication adapters), comprising the steps of:

reading priority information in which a priority assigned to each communication adapter is set from a profile (Falcon: Figure 7, "Connect Using" provides for a preferred adapter from a connection object/profile)

determining whether all the communication adapters configured in said system are available or not (Falcon: col 7, lines 27-61 specifies the system can determine if specific preferred devices are available and can even substitute other adapters if they are of the same type; See also Figure 11, item 1100);

disabling all of the communication adapters (Wallach: col 4, line 59 – col 5, line 7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister definition);

if it is determined that the communication adapter installed in said system is available and said read priority information indicates that the priority assigned to said communication adapter installed in said system is higher than a priority of the other communication adapters installed in said system, enabling said communication adapter installed system (Falcon: Figure 11, item 1102; col 9, lines 21-32 specifies the communication adapter is enabled if the device is available; Figure 11, item 1100 provides the preferred/priority adapter is the one enabled if available) to the exclusion of the other communication adapters (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled), wherein the other communication are disabled and remain disabled to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use).

The Falcon/Wallach/Glenning/Yeap system does not teach wherein the communication adapter in the system is a communication adapter installed in an expansion unit attached to said portable information device.

Henriksson, in a similar field of endeavor, teaches the use of a communication adapter installed in an expansion unit attached to said portable information device (Henriksson: abstract and Figure 1 which specify the communication card can be a PCMCIA network adapter).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Henriksson for using a cellular modem plugged into a PCMCIA slot. The teachings of Henriksson, when implemented in the Falcon/Wallach/Glenning/Yeap system, will allow one of ordinary skill in the art to create connection objects for plug-in communication adapters and assign them priorities, and then enable connections based on preferred adapters in the connection objects. One of ordinary skill in the art would be motivated to utilize the teachings of Henriksson in the Falcon/Wallach/Glenning/Yeap system in order to auto-configure plugged in network adapters and allow communication via cellular technology.

Regarding claim 9, the Falcon/Wallach/Glenning/Yeap/Henriksson system teach wherein at least one of the communication adapters installed in said portable information device is a wireless LAN adapter (Yeap: col 1, lines 50-62 specify that the communication card is a Wireless NIC and is contained within the computer) and the priority of said wireless LAN adapter set in said read priority information (Falcon: Figure

Art Unit: 2142

11, item 1104 specifies other similar communication adapters, in this case another wireless adapter) is immediately below the priority of the communication adapter installed in said expansion unit (Falcon: Figure 11, item 1100 and Figure 7, "Connect Using" provide that user can pick any system identified network adapter as the preferred adapter, such as Henriksson's PCMCIA wireless modem; Falcon: Figure 11, item 1102 provides that other wireless adapters are lower in priority to the preferred adapter).

Regarding claim 17, the Falcon/Wallach/Glenning/Yeap/Henriksson system teach a portable information device in which a plurality of communication adapters are installed and which can be connected with an expansion unit in which a given communication adapter is installed (Falcon: Figure 6 provides for multiple adapters; Henriksson: Figure 1 provides for an expansion unit adapter), said portable information terminal comprising:

storage for storing priority information indicating an order in which the communication adapters are enabled (Falcon: Figure 7, "Connect Using" and "Auto Connect" sections provide for priority adapters and priority connect objects; Figure 11, items 1100 and 1104 provide for an order of connection devices);

a connection recognition unit recognized a connection of said expansion unit (Henriksson: col 2, lines 54-67 specifies automatically identifying cards);

an adapter shutdown disables all of the plurality of communication adapters Wallach: col 4, line 59 – col 5, line 7 specifies that all adapters in a "canister" are disabled; See Figure 3, item 258 for canister definition);

an open-operation execution unit for executing an adapter open operation on all the communication adapters including said given communication adapter installed in said expansion unit when said connection recognition unit recognizes the connection (Henriksson: col 2, lines 60-67 specifies auto-detection and connection; Wallach col 4, line 59 – col 5, line 7 specify restarting and enabling communication of adapters, even newly connected ones);

a setting unit for enabling the given communication adapter among communication adapters successfully opened by said open-operation execution unit to the exclusion of other of the plurality of communication adapters according to said priority information stored in said storage (Falcon: Figure 11, item 1102; col 9, lines 21-32 specifies the communication adapter is enabled if the device is available; Figure 7, “Connect Using” option provides priority/preferred adapter is enabled), wherein other communication adapters remain disabled (Falcon: Figure 6 depicts the modems being disabled while the Ethernet is enabled which provides for other adapters remaining disabled) to reduce power consumption (Glenning: abstract and col 1, lines 31-51 specify idle adapters are disabled to reduce power use).

Regarding claim 18, the Falcon/Wallach/Glenning/Yeap/Henriksson system teaches wherein said priority information stored in said storage varies from location to location where said portable information device is used (Yeap: abstract and Figure 3, item 324 provide profile use is based on location; Falcon: Figure 7, “Connect Using” provides

preferred adapter is changed based on profile thereby providing combination provides for changing preferred adapter based on location).

Regarding claim 19, this portable information device claim contains limitations found in claims 17 and 7, and the same rationale of rejection is used where applicable.

Cited Pertinent Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Chuavel et al (US 7,111,177 B1) discloses a system and method for determining execution of tasks based on predicted power consumption of the tasks.
- b. Collins (US 6,697,953 B1) discloses a method for reducing power consumption in a portable device based on user preferences.
- c. Fuller et al (US 5,768,605) discloses a method for managing power to a PCMCIA card.
- d. Hernandez et al (US 5,752,050) discloses a method for managing power consumption of external devices by monitoring user and device activity.
- e. Marisetty (US 5,590,342) discloses a method for monitoring device use and then putting devices in a power saving state when they are determined to be idle.

- f. Miller (US 6,199,168 B1) discloses a system for using a PCMCIA modem in an expansion slot.
- g. Pate et al (US 5,944,831) discloses automatically disabling power to network cards when it is determined that traffic is not on the communication channel.
- h. Smith et al (US 5,167,024) discloses automatically disabling power and clock signals to laptop device components based on a determination that they are not currently in use.
- i. Stewart et al (US 5,504,907) discloses a system for automatically adapting time intervals to determine if a device is in use and managing power based off adapted time intervals and idle detection.
- j. Yabe et al (US 5,163,124) discloses a system for the user selecting which devices to power on in the BIOS as system startup.
- k. Microsoft ("Network Device Class") discloses the ACPI specification for Windows network devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./
Jeffrey Nickerson
Examiner, Art Unit 2142

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2142